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ABSTRACT

The purpose of this paper is to compare and contrast the higher education articulation and transfer policies and processes between the states of Florida and Maryland. The paper examines how the state governance structures impact articulation and transfer. Both states have instituted statewide policies meant to implement high levels of transfer between two-year and four-year institutions. The paper compares the results of different policies and programs, and attempts to make projections regarding future success for articulation and transfer within the two states. The State of Florida ranks fourth in the nation in population (15,111,244). 3.87% of the total Florida population is enrolled in higher education. Compared to the percentage of students in higher education in all states, Florida received a D+ rating. Florida received a B+ rating for completion rates, and a D for affordability factors. Florida has a 2+2 system of transfer, which means that students who earn an AA degree at a community college must be accepted into a Florida college or university. Maryland ranks 19th in the nation for population (5,171,643), with 4.13% of the population enrolled in higher education programs. Maryland received an A for percentage of students in higher education, and a B- for retention. Maryland received a D for affordability. Maryland aims to develop a 2+2 strategy for transfer. (Contains 22 references.) (NB)

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A Descriptive Study of the Associate in Science and Associate in Applied Science Degree General Education Modules for Articulation and Transfer in Maryland and Florida

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A Descriptive Study of the Associate in Science and Associate in Applied Science Degree General Education Modules for Articulation and Transfer in Maryland and Florida

Introduction

The global economy is expanding and new jobs are being created that require post-secondary education skills to meet the growing job market demands. The post-secondary education skills needed for the employee to be successful can be obtained through the pursuit of the Associate in Science (AS) and Associate in Applied Science (AAS) degrees at the community college. The growing educational demands will require additional baccalaureate degrees for countries to secure their place in the global economy. One solution to meet the growing marketplace requirements for more baccalaureate degrees is to develop articulation and transfer policies for holders of the AS/AAS degrees to pursue their baccalaureate degrees. Cohen and Brawer (Policies, 1996) claim a primary responsibility of the community college is to facilitate student transfer to a four-year institution. Based on an eight-year study, the authors provided data that the community college transfer rate was about 22 - 25% nationally. The demand for an educated workforce places greater emphasis on increasing the transfer rate across the nation. The authors' offer that improved advising and counseling, faculty support, and open transfer policies and programs at the four-year institution will support the needed increase in transfer rates.

The purpose of this paper is to provide a descriptive study that compares and contrasts the Associate in Science degree general education (Gen Ed) modules between the states of Maryland and Florida. Florida and Maryland have instituted statewide policies to implement AS/AAS Degree general education transfer between two-year (Community College) and four-year (University or College) institutions. The AS/AAS Degree Gen Ed articulation and transfer polices from the community colleges to university of both states will be provided to examine the seamless transition of AS/AAS degree Gen Ed transfer within each state. This study will examine and answer two research questions pertaining to AS/AAS degree Gen Ed modules transfer between the two states.

Research Questions

1. What are the general education modules for the Associate in Science and Associate in Applied Science Degree Programs for Maryland and Florida?

2. Are the articulation and transfer policies of Maryland and Florida designed to provide a seamless transition between community colleges and state universities?

Methodology

The methodology of this descriptive study is to examine Maryland and Florida's official documents on articulation and transfer for the AS/AAS degree Gen Ed modules. The analysis of the articulation and transfer polices of both states will compare and contrast the ability of a student to transfer the AS/AAS degree Gen Ed modules to the university in pursuit of a baccalaureate degree. The comparison of the two state policies and procedures should provide a yardstick for measuring the ability to transfer between the community college and the university.

Literature Review

Definition of Terms

Defining the terms of general education modules, articulation, transfer, native student, transfer student, receiving institution, and sending institution is required for the understanding of articulation and transfer policies within Florida and Maryland. A study of the literature on articulation and transfer is needed to ensure understanding of the terms and concepts that allows students to move from two-year to four-year institutions. The definitions provide a common framework in which to make comparisons and contrasts between the two state programs.

The Maryland Student Guide to Transfer (Student Guide, 2001) defines general education modules as courses that are "designed to introduce undergraduates to the fundamental knowledge, skills and values that are essential to the study of academic disciplines, to encourage the pursuit of life-long learning and to foster the development of educated members of the community and the world" (p. 3). Florida (Articulation Manual, 2001) defines general education modules as "core curriculum in the liberal arts and sciences comprised of courses which meet the Southern Association of Colleges and Schools (SACS) Commission on Colleges criteria" (p. 3).

Ignash and Townsend (2001) provided seven guiding principles for the establishment of a strong statewide articulation agreement. The seven principles are:

- Equal Partners. "Associate and baccalaureate degree-granting institutions are equal partners in providing the first two years of baccalaureate degree programs."
- Comparable treatment of transfer and native students. "Transfer students should be treated comparably to 'native' students by the receiving institutions."
- Faculty involvement. "Faculty from both two-and four year institutions have primary responsibility for developing and maintaining statewide articulation agreements."
- The general education transfer package. "Statewide articulation agreements should accommodate those students who complete a significant block of coursework (such as general education requirements) but who transfer before completing the associate's degree."
- Articulation in the majors. "Articulation agreements should be developed for specific program majors."
- Involvement of private institutions. "A state's private institutions should be included in statewide articulation agreements."
- Statewide evaluation. "A statewide evaluation system should monitor the progress and completion of transfer students." (pp. 176-179)

Cohen and Brawer (Collegiate, 1996) provided a framework for articulation. The articulation process of developing and reviewing curriculum and coursework rests with the faculty at the sending and receiving institutions to determine course comparability. The community college and university faculty is responsible for reviewing course content and authorizing acceptance of specific courses, sequence of courses, and programs for transferring students. Once this review and formal written acceptance process has occurred, a course, sequence of courses, or programs are said to have been articulated. The content of the courses at the community college assumes the necessary background and preparation has occurred to allow

the student to progress to the next level of instruction at the four-year university.

Barkley (1993) indicates that articulation efforts are even more critical now than they were in the past. The author states that "public accountability for higher education combined with reduced levels of funding make it imperative that the nation's community colleges and four-year institutions (private as well as public) communicate, collaborate, and cooperate in the delivery of higher education" (¶ 2). Manzo (1998) reports that in many states, the "community college administrators are working hard at hammering out articulation agreements with their university neighbors" (¶ 38). Manzo also points out that many states are now directing state articulation policies to ensure accountability to the taxpayer and provide increased transfer opportunities. Welsh and Kjorlien (2001) indicate that 43 states have some form of an automated system for potential transfer students to review transfer and articulation policies and programs within their state.

There are many definitions offered by scholars who have examined the transfer process within higher education. For the purpose of this paper, the transfer process will focus on the traditional "vertical" transfer of students from a two-year institution (Community College) to a four-year institution (University) and is defined by a combination of two definitions of transfer provided by Eaton (1996) and the Florida Department of Education (Pathways, 2001). Eaton defines transfer as:

> the movement of students from one institution to another. Students take certain packages of academic experiences from one institution and request that another institution formally recognize these packages—whether made up of courses, programs, or degrees. Transfer is a complex activity involving students, faculty, administrators, at least two institutions, many departmental interests, and perhaps even state regulations. (p. 559)

Another definition of transfer provided by the Florida Department of Education adds one more aspect in defining transfer. The Florida Department of Education (Pathways, 2001) defines articulation as "the joining of two or more segments or sectors of education" (p. 1). The Maryland Student Guide to Transfer (Student Guide, 2001) defines a transfer program as a "planned program of courses, including both general education and courses in the major, taken at a community college which is applicable to a baccalaureate program at the receiving institution; ordinarily the first two years of the baccalaureate degree" (Glossary).

The native student, as defined by Carlan and Byxbe (2000), began his or her higher educational studies at a four-year institution and has not transferred to another institution of higher education. The transfer student is one who began his or her studies at a community college and has transferred academic credit to a four-year institution. The sending institution is a community college where the student earned transferable academic credit to be accepted by the four-year institution. The receiving institution in where a transfer student wants to enroll and have academic credit earned at a community college accepted at the four-year institution.

Maryland (Student Guide, 2001) defines the native student as "a student whose initial college enrollment was at a given institution of higher education and who has not transferred to another institution since that initial enrollment." Maryland also defines a transfer student as "a student entering an institution for the first time with academic credit earned at another

institution which is applicable for credit at the institution the student is entering" (Glossary). Florida (Acronyms, 2003) defines "a native student as a student who started as a freshman and remained in the same institution, as opposed to a transfer student." Florida also defines "a transfer student as a student who attended one or more colleges as a regular student in addition to the one in which currently enrolled, as opposed to a native student" (Glossary).

Florida's AS/AAS Degree Gen. Ed. Articulation and Transfer Policies and Programs

The Florida Board of Education has direct responsibility for transfer and articulation policies and programs as specified in Florida Senate Bill S0020E (2002), section 1001.02, Para c. The FBOE will:

> Execute general supervision over the divisions of the Department of Education as necessary to ensure coordination of educational plans and programs and resolve controversies and to minimize problems of articulation and student transfers, to ensure that students moving from one level of education to the next have acquired competencies necessary for satisfactory performance at that level. (pp. 44-45)

This new Florida statute is very explicit in providing direct responsibilities to the FBOE for sorting through and correcting articulation and transfer issues.

In the early 1970's, a group of educators formed a committee called the Articulation Coordinating Committee whose task was to organize and define a set of rules and guidelines to help students transfer from one institution to another. As a result, the State of Florida has a well-defined articulation process outlined in the Florida Senate Bill S0020E (2002) located in sections 1007.22-25 called the Articulation agreement; acceleration mechanisms. This agreement and mechanisms coordinates the articulation process between accredited public and private two-year and four-year institutions.

The articulation agreement, Florida Senate Bill S0020E (2002), sections1007.22-25, guarantees admission to those graduates who hold an Associate in Science (A.S.) degree whose program is listed in the Statewide Articulation manual as well as those with an A.S. from the interdisciplinary capstone degree program. The general curriculum needed for transfer varies from program to program, and students should check for specifics either in the Statewide Articulation Manual (2001) or at their community college or University. Again, the only exception is for programs that have limited access or other requirements such as a higher grade point average or higher test scores. In addition, Florida residents who are transferring with an A.S. will have preference with respect to admittance over an out-of-state student.

Transfer and articulation are issues that affect any student moving from one institution to another. The transition may be a seamless process or may be problematic depending on the transfer and articulation policies of a particular state. The Florida Department of Education (Pathways, 2001) defines

> articulation in the context of education refers to the joining of two or more segments or sectors of education. It may also refer to the process of making a transition or transfer from one sector of education to another. Examples are the process of earning college credit while still in high school, the process of admission of high school graduates to a college or university, the process of transferring credits earned at one college or

> university to another, and the process of admission to a graduate program following completion of a baccalaureate degree program. (p. 1)

Florida's (Administrative Rules, 2002) state that the AS degree is the career education degree of the community college and is intended to prepare students to enter the workforce. The state provides for articulation of the AS degree only to the baccalaureate degree. The state does not have a policy for the AAS degree to articulate. One of the criteria for articulation is that the community colleges can award an AS degree after completion of at least 15-18 semester hours in the general education curriculum in the liberal arts and sciences that meets the SACS criteria. General education courses taken as part of the AS degree will transfer and apply toward the 36 credit hour general education module for the baccalaureate degree. No additional Gen Ed courses for the transfer student can be required beyond the baccalaureate requirement of 36 credit hours. Additional guidance is given that if a university accepts a "D" grade for a native student in the Gen Ed courses, then a "D" grade of a transfer student will be accepted by the university.

According to Pathways (2001), the Division of Community Colleges has signed an articulation agreement with the State University System and with the 26 Independent Colleges and Universities of Florida. This agreement provides rules and guidelines for the transfer of students from institution to institution. To facilitate the transfer process, Florida has adopted a Statewide Course Numbering System (SCNS) that classifies courses by subject. In order to smooth the transfer process, all public universities, community colleges, and vocational-technical schools as well as a few private institutions have adopted the use of this numbering system.

The Statewide Articulation Manual (2001) only allows for five (5) statewide approved AS degrees to articulate and transfer through the AS to BS program to the state university. The five AS to BS degrees are in Radiology, Nursing, Hospitality and Tourism Management, Electrical Engineering Technology, and Business Administration and Management. Each of the five AS degrees have a different Gen Ed module. There is not a common Gen Ed module for the statewide approved AS to BS degree programs. The Florida Administrative Rules (2002) allows for individual state and private universities to develop interdisciplinary capstone baccalaureate degree programs that allow for community college AS degree transfer. This initiative is just starting to gain momentum as the 11 state universities are designing AS to BS degree programs in other disciplines than the five state-wide approved programs. To date no AS degree student or graduate has been able to transfer to a state or private university under the interdisciplinary capstone baccalaureate degree program. Therefore, only the five state-wide approved AS to BS degree program can be used to compare Florida's AS degree Gen Ed module to the Maryland AS degree Gen Ed module. Florida's AAS degrees, which do not articulate or transfer cannot be compared to Maryland's AAS degrees, which allows for articulation and transfer.

Maryland's AS/AAS Degree Gen. Ed. Articulation and Transfer Policies and Programs

The Maryland Higher Education Commission (MHEC) has direct coordinating responsibility for transfer and articulation policies and programs. The MHEC does permit each higher education institution to determine how to incorporate the goals, objectives, and strategies into their mission and planning process. The objectives and strategies provides guidance to

community colleges and universities to provide real opportunities for transfer and articulation within Maryland.

According to the 2000 Maryland State Plan (2001) Maryland community colleges grant the Associate of Science (AS) and the Associate of Applied Science (AAS). Transfer or Pre-baccalaureate degree programs (AS, AAS) are aimed at meeting the needs of students who intend to earn a bachelor's degree from a four-year college or university. These programs are specifically designed so that all course work will transfer to a four-year institution. In fact, optional course offerings are available to students taking transfer programs that can be tailored to the specific major fields students plan to pursue in their junior and senior years (and can also be tailored to the requirements of specific four-year colleges and universities).

In Maryland, a student may transfer from the community college to the four-year university without loss of time or duplication of courses. Maryland has established a set of principles to ensure transferability. According to Tschechtelin (1997), the MHEC made four major changes in 1996 to the articulation and transfer policy to facilitate the ease of AS/AAS degree Gen Ed transfer for Maryland's students. The changes were:

(1) The Associate of Science degrees requires a minimum of 30 credits and a maximum of 36 credits of general education, and the Associate of Applied Science degree requires a minimum of 20 credits and a maximum of 36 credits of general education,
(2) A student transferring to a public four-year institution who has completed the 30 to 36 lower-division credits would be required to take a maximum of 46 general education for the Bachelor of Science degree,
(3) a student who has taken any part of the 20 to 36 lower-division general education credits at a public college or university would receive lower-division general education credit for those courses successfully completed at any public institution to which that student transfers, and
(4) All institutions would use common definitions and guidelines in determining which course could be offered for general education credits. (¶ 27)

The MHEC policies are to ensure a more cohesive transfer process without loss of credits for students who transfer before completing the Associate's degree. The policy changes created a common articulation and transfer guidelines for 16 community colleges, 13 public four-year universities, and 21 private four-year universities.

According to Ignash (2002, April), the AS/AAS degree students can articulate between 20 and 36 credits in general education in English composition, math, arts and humanities, social and behavioral sciences, biological and physical sciences, and interdisciplinary and emerging issues. The official policy is for one half of the Associate degree, not to exceed 70 semester hours, as the maximum transferable credits allowed. An interesting feature of Maryland's AS degree general education articulation policies is that universities can require additional general education after the student transfers. Students in Maryland may be required to take between 10 and 16 additional semester credit hours of general education after transfer as part of the B.S. degree. Guidance is given that if a university accepts a "D" grade for a native student in the Gen Ed courses, then a "D" grade of a transfer student will be accepted by the university. Additional credits may be assigned by each institution from English; mathematics; arts and humanities; social and behavioral sciences; and biological and physical sciences to complete the number of

credits required for the general education program. There are pro's and con's in this approach. A positive point is that Maryland's agreement guarantees that a substantial portion of general education credits will be accepted in transfer. A negative point is that it also allows receiving institutions to impose their own additional general education requirements upon students after transfer. If students delay in choosing a transfer institution, they may lengthen time-to-degree by having to take additional general education coursework after transfer. This problem, however, is mitigated in that there is a cap on how many additional hours of general education can be required for the B.S. degree (e.g. no more than 10 to 16 semester hours). (p.9)

Results and Implications

Question 1. What are the general education modules for the Associate in Science and Associate of Applied Science Degree Programs for Maryland and Florida? Shown in Table 1 are the general education modules required for all of Maryland's AS/AAS degrees and Florida's five statewide approved AS degrees. The data in this table illustrates the difference in courses and credit hours required for the AS/AAS degree general education modules.

Question 2. Are the articulation and transfer policies of Maryland and Florida designed to provide a seamless transition between community colleges and state universities? Shown in Table 2 is a comparison of the articulation and transfer policies of the two states.

Maryland's AS/AAS degree general education articulation and transfer policies are more conducive to the establishment of a seamless transition between the community colleges and universities. Maryland has Gen Ed articulation and transfer policies for AS/AAS Degree general education of 20-36 credit hour transfer with the remaining credit hours based on individual articulation agreements between higher education institutions. Maryland's policy of automatic AS/AAS degree transfer of 20-36 Gen Ed credits for all AS/AAS degrees is more student friendly and provides a seamless transition of general education courses. Florida has established specific Gen Ed transfer directives for only five AS Degree disciplines with mandatory transfer of up to 15-24 credit hours of the specific Associate of Science degrees and allows for individual school-to-school interdisciplinary capstone articulation agreements. Florida's current policy only allows for transfer of the five AS degree programs (Radiology, Nursing, Hospitality and Tourism Management, Electrical Engineering Technology, and Business Administration and Management) of 15-24 general education modules. According to the Statewide Articulation Manual, no Florida AAS degree is approved for articulation and transfer. This is more restrictive to a seamless transfer in comparison to Maryland's AS/AAS Degree Gen Ed module transfer.

Using Eaton (1996) and the Florida Department of Education (Pathways, 2001) definitions of transfer, both Florida and Maryland have met all elements of the combined definition. Both states, through the MHEC and FBOE, use their transfer principles and published policies to ensure the joining of the many sectors of the educational structure. This paper has focused only on the linkage of community college to university, however, both states also link K-16 (Maryland) and K-20 (Florida) as a feature of their transfer policy. The movement of students from one institution to another does occur in both states. Actual AS/AAS degree transfer figures are not available for either state. However, data is available on the number of students and a percentage of transfer is available. Florida (Pathways, 2001) has an

effective transfer policy based on numbers and percentage of 50,793 students or 23.3% transferring to public colleges or universities for 2000. As presented by Petrimoulx (2001), one of Florida's schools, the University of South Florida (USF) is proud of its transfer program. USF boasts that more than 50 percent of their entering class are transfer students. More students transfer to USF than any other school in the nation. Maryland's transfer rates (Filipp, 2001) indicate that in fall of 2000, 2,718 students, or 23.8% transferred to a public university. The state percentages are almost identical and do not favor one state over the other.

DISTRIBUTION AREAS	MARYLAND ALL AAS DEGREES (CREDITS)	MARYLAND ALL AS DEGREES (CREDITS)	FLORIDA RADIOGRAPHY AS DEGREE (CREDITS)	FLORIDA NURSING AS DEGREE (CREDITS)	FLORIDA HOSPITALITY ADMIN. & MGMT. AS DEGREE (CREDITS)	FLORIDA ELECTRONICS ENGR. AS DEGREE (CREDITS)	FLORIDA BUS. ADMIN. AS DEGREE (CREDITS)
English Composition	3 Minimum	3 Minimum	3 Maximum	3 Maximum	6 Maximum	6 Maximum	6 Maximum
Mathematics at or above college algebra	3 Minimum	3 Minimum	3 Maximum	3 Maximum	3 Maximum	3 Maximum	6 Maximum
Arts & Humanities	3 Minimum	6 Minimum (1 Arts & 1 Hum. or may also be Speech, For. Lang. Comp. or Lit. courses	3 Maximum Humanities only	3 Maximum Humanities only		3 Maximum Humanities only	3 Maximum Humanities only 3 Maximum Speech only
Social & Behavioral Sciences	3 Minimum	6 Minimum (1 from each)	3 Maximum	3 Maximum	6 Maximum	6 Maximum	
Biological & Physical Sciences	3 Minimum Includes Lab	6 Minimum 2 courses, includes 1 Lab		6 Maximum	3 Maximum	4 Maximum Physics only	
Inter Disciplinary & Emerging Issues	Optional (8 max) not required, will transfer as part of Gen Ed Program	Optional (8 max) not required, will transfer as part of Gen Ed Program					
Additional credits	5-21 credits from English, Math., Arts & Hum., Social & Behav. Sciences; and Bio. & Physical Sciences to complete credits required for the Gen Ed Program.	0-12 credits from English, Math., Arts & Hum., Social & Behav. Sciences; and Bio. & Physical Sciences to complete credits required for the Gen Ed Program.	3 Maximum Computer Science only				6 Maximum Economics only
TOTAL GEN ED CREDITS REQUIRED FOR AS/AAS DEGREE	20 - 36 credits	30 - 36 credits	15 credits	18 credits	18 credits	22 credits	24 credits
REMAINING GEN ED REQ'T FOR BS DEGREE	10 - 26 credits Maximum	10 - 16 credits Maximum	21 credits Maximum	21 credits Maximum	18 credits Maximum	14 credits Maximum	12 credits Maximum

Table 1 – Maryland and Florida AS/AAS Degree Transfer General Education Modules (Data for this chart is from Florida Statewide Articulation Manual (2001) and the Maryland Student Guide to Transfer (2001).

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Maryland did establish a statewide policy of articulation. However, as a coordination board, the MHEC has less power to enforce articulation within Maryland. Florida does have a well-defined statewide policy on articulation as indicated by a common course numbering system. Maryland provided guidance on the articulation process, but left the acceptance of course work to the receiving institution. The effectiveness of the articulation guidance can be judged by the numbers of transferring students. Maryland literature highlighted an extensive student appeal process for the articulation of courses or programs. Maryland also strongly encourages students to interact with a Transfer Coordinator and use the ARTSYS software to ease transfer to the receiving institution. The Florida's transfer policy is certainly more student friendly and less complicated than Maryland's. Both states required direct involvement of the faculty in reviewing the curricula, courses, and programs for articulation and transfer. Florida and Maryland did include all interested parties in the articulation and transfer process.

The seven guiding principles provided by Ignash and Townsend (2001) can be used as the evaluation yardstick for the Florida and Maryland articulation agreements. "Parity among institutions - community colleges and four-year institutions are equal partners" (¶ 6). The articulation and transfer principles presented by each state does support parity between community colleges and universities. The stated policies did not favor one type of institution over another. "Parity of students - native and transfer students are treated equally by receiving institutions" (¶ 7). Florida clearly stated that native and transfer students would be treated equitably. Maryland did not specify parity of students, however, there was no mention that they should not be treated the same. In Maryland, the student transfer numbers were considerably less than Florida. This would indicate that transfer students were not readily accepted at the receiving institution, and therefore not treated equitably.

Ignash and Townsend (2001) also stated "faculty have primary responsibility for developing actual statewide articulation agreements" (¶ 6). There was not a statewide articulation agreement for all courses in either state. Florida, according to the Florida Senate Bill S0020E (2002), does have a common agreement for 15-24 credit hour Associate in Science Degree of general education courses. Maryland (Students, 2001) directed that AS/AAS degree 20-36 general education credit hours would be transferred. Both states required sending individual institutions to develop articulation agreements with receiving institutions. In Maryland, the faculty was charged with developing individual articulation agreements. In Florida, program and course curriculum frameworks are developed by the faculty and approved by the Florida's Articulation Coordinating Committee and are covered under the statewide articulation agreement.

Southern Illinois University Carbondale (SIUC) provides an excellent model of an Interdisciplinary Capstone Agreement for independent articulation and transfer programs. SIUC has developed the "Capstone Option" that makes it possible for students to earn a bachelor's degree in 60 additional credit hours beyond the AS/AAS degree and allows them to complete an abbreviated university core curriculum requirement of 30 credit hours in twenty-nine (29) academic disciplines. Key features of the Capstone Option are:

> (1) gives occupational students who have changed their educational and occupational goals an opportunity to pursue a four-year degree; (2) is an alternative option to obtaining the four-year degree requiring no more than two additional years of college; (3) seeks to

recognize similar objectives in both two-year occupational programs and four-year baccalaureate degree programs; and (4) seeks to recognize similar objectives in certain work experiences and in four-year baccalaureate degree programs (Capstone, 2003).

One of Ignash and Townsend's (2001) guiding principles required articulation to "accommodate students who transfer without an associate degree" (¶ 7). Both states require students with AS degrees be allowed to transfer. Maryland's articulation and transfer principles indicated that students without an associate degree could also transfer to a receiving institution. Maryland (Students, 2001) allowed up to 70 credit hours to transfer, but had a review process to decide what courses would transfer beyond the initial 30-36 general education courses.

Ignash and Townsend (2001) provide additional principles for comparison. "Develop agreements to transfer program majors and program major courses " (¶ 8). The Maryland transfer guide did allow for courses and program majors to transfer. The individual transfer agreements would specify what programs and courses would transfer in both states. Maryland posted on the ARTSYS information system the programs and courses that would transfer. "Private colleges and universities participate in statewide agreement " (¶ 8). Florida and Maryland incorporated the private institutions into the state articulation and transfer principles. "Data driven evaluation on statewide articulation agreement " (¶ 8). Statistical data was available on transfer rates in numerous categories from both states. However, evaluation of the data was not available on the effectiveness of the articulation agreements. Table 2 compares Maryland and Florida's articulation and transfer policies using the Ignash and Townsend's Seven Guiding Principles for Articulation.

Ignash & Townsend's 7 Guiding Principles for Articulation	**Maryland**	**Florida**
Equal Partners	Yes	Yes
Comparable Treatment of Transfer and Native Students.	Yes	Yes
Faculty Involvement	Yes	Yes
General Education Transfer Package	Yes, All AS/AAS Gen. Ed. Modules Transfer	Limited to 5 AS Approved Degrees
Articulation in the Majors	Yes, But Some AS/AAS Core Courses May Not be Accepted For Transfer by Receiving Institution	Yes, for only 5 AS Degrees. No Other AS/AAS Core Courses Transfer under Statewide Articulation Agreement
Involvement of Private institutions	Yes	Yes
Statewide Evaluation	Yes	Yes

Table 2 – Comparison of Maryland & Florida using Ignash & Townsend's Seven Principles of Articulation

Florida does have a common course numbering system in place that allows for ease of articulation and transfer between the community colleges. The Florida common course numbering system is a good start point for faculty discussions between both institutions for developing articulation agreements. The groundwork for matching course curriculum

frameworks and students competencies has been completed. Maryland does not have a statewide common course numbering system. This adds an additional requirement for Maryland's faculty at the community college and university level to analysis curriculum and specific courses in detail to ensure student competencies in the community college courses match competencies required at the university level. This analysis of course competencies adds additional time and effort to developing articulation agreements. Both states rely on providing guidance through a set of *principles and guidance for the development of series of individual articulation* and transfer agreements between higher educational institutions.

The Eaton (1996) and Florida Department of Education (Pathways, 2001) combined definition of transfer indicated that there were no major differences in either state affecting student transfer to receiving institutions. Using Ignash and Townsend's (2001) seven guiding principles provided an excellent assessment tool to measure the articulation policies of Florida and Maryland. The assessment of both states indicates that Maryland has a better-defined set of AS/AAS degree Gen Ed articulation and transfer policies and agreements. Florida only allows for five AS degree Gen Ed transfer covered under the statewide articulation and transfer policy. Maryland is considerably more flexible in what it allows the receiving institution to be able to require after transfer.

A comparison of the articulation and transfer policies of the two states reveals the different approaches that each state has established in the creation of a seamless transition between community colleges and state universities. The comparison of Maryland's and Florida's articulation and transfer policies are shown in Table 3. The implications of the articulation and transfer policies of both states have some student friendly elements imbedded and some not-so-student friendly attributes. Maryland has a student friendly policy for the articulation and transfer general education modules for the AS/AAS degrees, and that transfer and native students are treated the same. Maryland's has a not-so-student friendly policy on the acceptance of the core courses within the AS/AAS degree programs and the possibility that the individual university could require additional Gen. Ed. courses. Florida's acceptance of all Gen. Ed. and core courses for 5 AS degrees is certainly student friendly. However, almost all of Florida's AS/AAS degree programs do not articulate or transfer which is not student friendly.

Articulation and Transfer Policies	**Maryland**	**Florida**
Statewide:		
Transfer of the AS Degree After Competition of Gen. Ed. Module	All AS Degrees Transfer With Approved Gen. Ed. Module	Limited to Only 5 AS Degrees
Transfer of the AAS Degree After Competition of Gen. Ed. Module	All AAS Degrees Transfer with approved Gen. Ed. Module	No AAS Degrees Transfer
Additional Gen. Ed. Courses Required at Baccalaureate Level	AS Degree: 10-16 Cr Hrs AAS Degree: 10-26 Cr Hrs	AS Degree: 12 - 21 Cr Hrs AAS Degree: Do not Transfer
Requires Additional Gen. Ed. Courses Beyond State Policy	Additional Gen. Ed. Courses May Be Required At Discretion of Receiving Institution	No
Native Student Treated Same as Transferring Student	Yes	Yes

Common Course Numbering System	No	Yes
Individual Institutions:		
Acceptance of AS/AAS Core Courses	Core Courses Individually Evaluated and Accepted By University, Can lose Cr Hrs	Automatic Acceptance Of The 5 AS Degrees – No Loss Of Core Cr Hrs
Allows for Individual Articulation Agreements	Yes	Yes

Table 3 – Comparison of State Articulation and Transfer Policies

Conclusion

The analysis of the AS/AAS degree general education module indicates Maryland has achieved a greater partnership and a seamless transition between the community colleges and the state universities for articulation and transfer. Maryland has established a common Gen Ed module that is part of all AS/AAS degrees offered by the 16 community colleges. The public universities are required by Maryland's articulation and transfer policies to fully accept all 20-36 general education credits and up to 70 total credits of an AS/AAS degree. Maryland students are required to complete a total of 46 general education credits (20-36 credits earned at community colleges) to receive a baccalaureate degree. All of Maryland's AS/AAS degree general education credits can articulate and transfer to the university. However, the Maryland receiving institution can require additional general education credit hours beyond the 46 hours. Individual articulation agreements between community colleges and universities are required for the transfer of the remainder of the AS/AAS degree core courses in order for the transfer student to complete a baccalaureate degree at the receiving institution. Transferring students are subject to loosing core credits beyond the general education credits based on the individual university assessment of the transferring students academic transcript. The entire AS/AAS degree really does not articulate and transfer to the university through a seamless transition process. Maryland should develop a statewide articulation agreement that specifies the core coursework for AS/AAS degrees that transfer to the universities like Florida. Maryland, with its common Gen Ed module, should use the Florida's articulation process and develop AS/AAS degrees that transfer with no potential loss of core courses.

Florida's AS degree general education module of 15-24 credits only transfers for the five AS degrees in Radiology, Nursing, Hospitality and Tourism Management, Electrical Engineering Technology, and Business Administration and Management. The public universities are required by Florida's articulation and transfer policies to fully accept all 15-24 general education credits and all of the credits of one of the five AS degrees. Florida students are required to complete 36 general education credits (15-24 credits earned at community colleges) to receive a baccalaureate degree under the AS to BS program. Currently only five of Florida's AS Degrees can articulate and transfer to the university. Florida's universities, under the AS to BS program are required to accept all general education and core courses and do not loose any earned credits. Therefore, the five AS degree programs that Florida has established are seamless. However, the entire AS (less the 5 AS degrees) and none of the AAS degree programs offered by Florida's 28 community colleges do not articulate and transfer. There is no agreement on the Gen Ed modules or the core courses for the remaining AS/AAS degrees. The good news for the articulation and transfer of

these other AS/AAS degrees is that the state policy encourages individual articulation agreements under the Interdisciplinary Capstone Agreement. This is the equivalent of Maryland's policy to encourage sending and receiving institutions to strike articulation and transfer agreements for AS/AAS degrees. Florida should develop and implement a general education module that is standard for all AS/AAS degrees and then use the Interdisciplinary Capstone Agreement as the vehicle to articulate and transfer all AS/AAS degrees through a statewide process, or mandate the articulation of all AS/AAS degrees. The ideal articulation and transfer policy for the seamless transition between the community colleges and state universities would be to incorporate Maryland's policies on articulation on Gen. Ed. Modules for both the AS and AAS degrees with Florida's policy of articulation and transfer of the entire AS degree curriculum of the 5 directed academic disciplines.

References

2000 Maryland State Plan for Postsecondary Education (2001). Retrieved February 11, 2003, from Maryland Higher Education Commission: http://www.mhec.state.md.us/Publications/NewStatePlan/stateplan.htm

Barkley, S. M. (1994). A synthesis of recent literature on articulation and transfer. *Community College Review, 20*(4), 38-51. Retrieved February 12, 2003, from EBSCO database.

Carlan, P. E., & Byxbe, F. R. (2000). Community colleges under the microscope: An analysis of performance predictors for native and transfer students. *Community College Review, 28*(2), 27-43. Retrieved February 12, 2003, from EBSCO database.

Cohen, A. M., & Brawer, F. B. (1996). Collegiate function: Transfer and the liberal arts. In *The American Community College* (pp. 307-334). San Francisco: Jossey-Bass.

Eaton, J. S. (1996). Promoting coherence in transfer practices. In J. G. Gaff, J. L. Ratcliff, & Associates (Ed.), *Handbook of the undergraduate curriculum* (pp. 558-570). San Francisco: Jossey-Bass.

Filipp, L. (2001, June). Retention, graduation and transfer rates at Maryland community colleges. Retrieved February 15, 2003, from Maryland Higher Education Commission: http://www.mhec.state.md.us

Florida Senate Bill S0020E (2002). Chapter # 2002-387. Retrieved February 15, 2003 from http://www.leg.state.fl.us/Session/index.cfm?Mode=Bills&SubMenu=1&Tab=session&BI_Mode=ViewBillInfo&BillNum=0020&Chamber=Senate&Year=2002E&Title=%2D%3EBill%2520Info%3AS%25200020%2D%3ESession%25202002E

Florida Community College System: Acronyms and Glossary of Terms (2002). Retrieved February 15, 2003 from http://www.dcc.firn.edu/flccs/glossary.htm#N

Florida Community College System: Facts at a Glance (2002). Retrieved February 15, 2003 from http://www.dcc.firn.edu/flccs/facts_glance.htm

Florida State Board of Education Administrative Rules (2002). Articulation Between Universities, Community Colleges, and School Districts. Chapter 6A-10.024

Florida Statewide Articulation Manual (2001). Florida Department of Education.

Ignash, J. M., (2002, April). *The process of statewide articulation in four comparison states.* Paper presented at the 44th annual conference of the Council for the Study of Community Colleges, Washington Trade and Convention Center, Seattle, WA.

Ignash, J. M., & Townsend, B. K. (2001). Statewide transfer and articulation policies: Current practices and emerging issues. Chapter 9. In Townsend, B.K. and Twombly, S.B., eds.

Community Colleges. Policy in the Future Context. Westport, Connecticut: Ablex Publishing.

Manzo, K. K. (1998). Articulation's swinging pendulum. *Community College Week, 10*(13), 6-9. Retrieved February 12, 2003, from EBSCO database.

Pathways to Success. Florida Student Transfer Brochure (2001). Retrieved February 11, 2003, from Florida Department of Education: http://www.firn.edu/doe/postsecondary/booklet.pdf.

Petrimoulx, J. (2001). USF top pick of transfer students. Aggressive recruitment is the key to success in luring students from other schools, officials say. Retrieved February 15, 2003, from http://www.sptimes.com/News/08310/Hillsborough/ USF_top_pick_of_trans.shtml.

Student Guide to Transfer among Maryland Colleges and Universities (2001). Retrieved February 11, 2003, from Maryland Higher Education Commission: http://www.mhec.state.md.us/AcadAff/stguide.htm

Southern Illinois University Carbondale Capstone Option (2003). Retrieved March 6, 2003, 2003, from Southern Illinois University Carbondale: http://www.siu.edu/departments/oar/public_html/oareval/capstone.htm

Tschechtelin, J. D. (1997). Maryland community colleges; A patchwork quilt. *Community College Journal of Research and Planning, 21*(4), 415-430. Retrieved February 12, 2003, from EBSCO database.

Welsh, J. F., & Kjorlien, C. (2001). State support for interinstitutional transfer and articulation: The impact of databases and information systems. *Community College Journal of Research and Planning, 25*(4), 313-333. Retrieved February 12, 2003, from EBSCO database.

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